

NOV 24 2003
 U.S. PATENT & TRADEMARK OFFICE

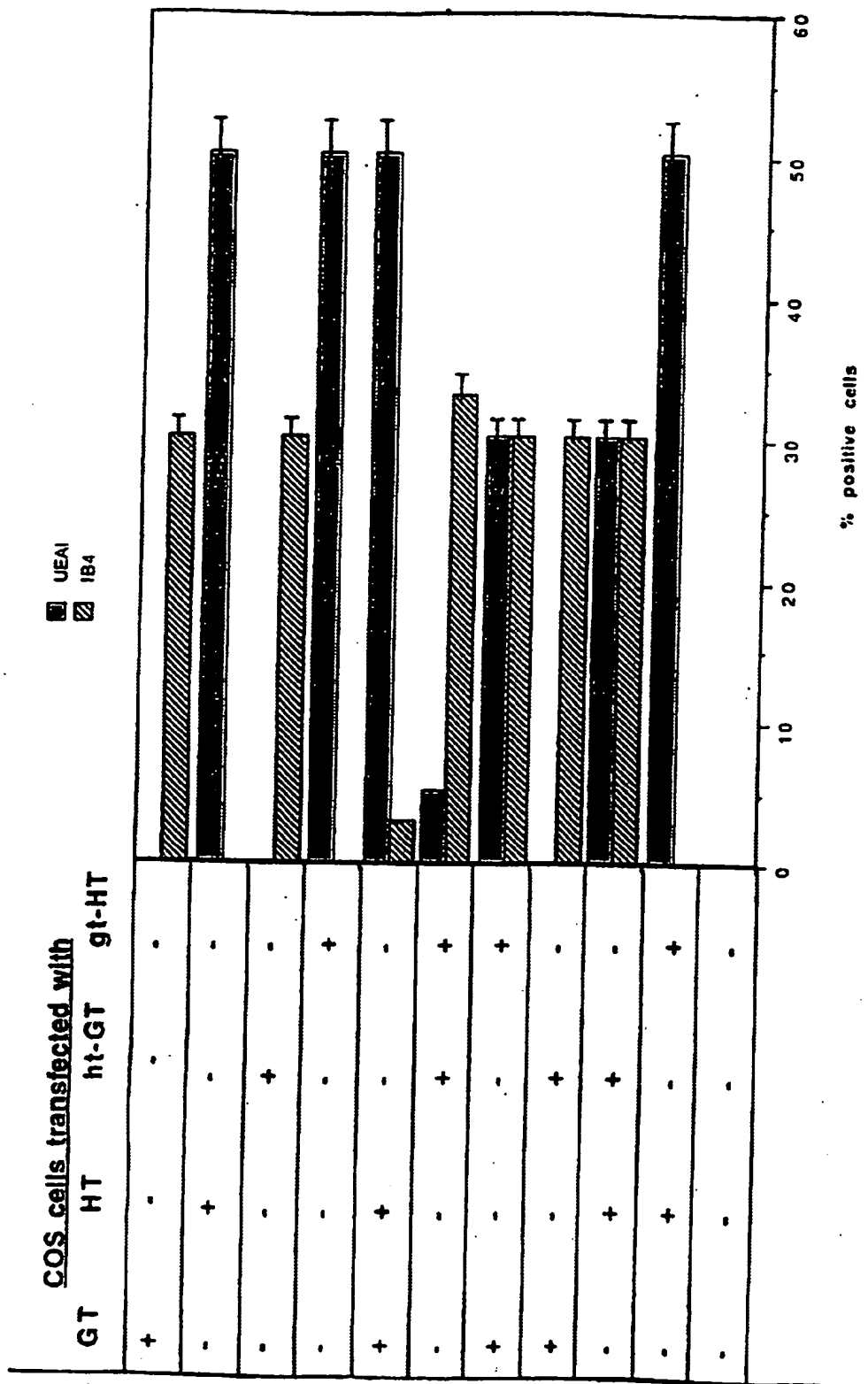


FIGURE 2



Docket No.: 305 SWO
Title: IMPROVED NUCLEIC ACIDS ENCODING A CHIMERIC
GLYCOSYLTRANSFERASE
Serial No.: 09/051,034
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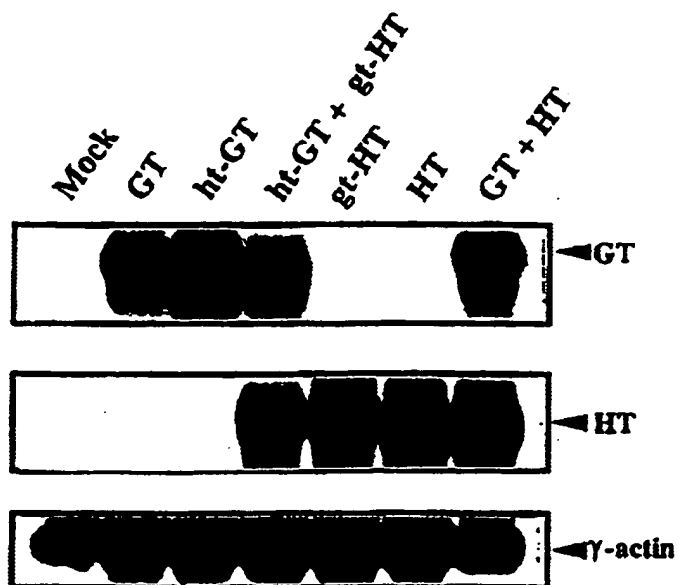


FIGURE 3

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Docket No. 62.6USWO
Title: IMPROVED NUCLEIC ACIDS ENCODING A CHIMERIC
GLYCOSYLTRANSFERASE
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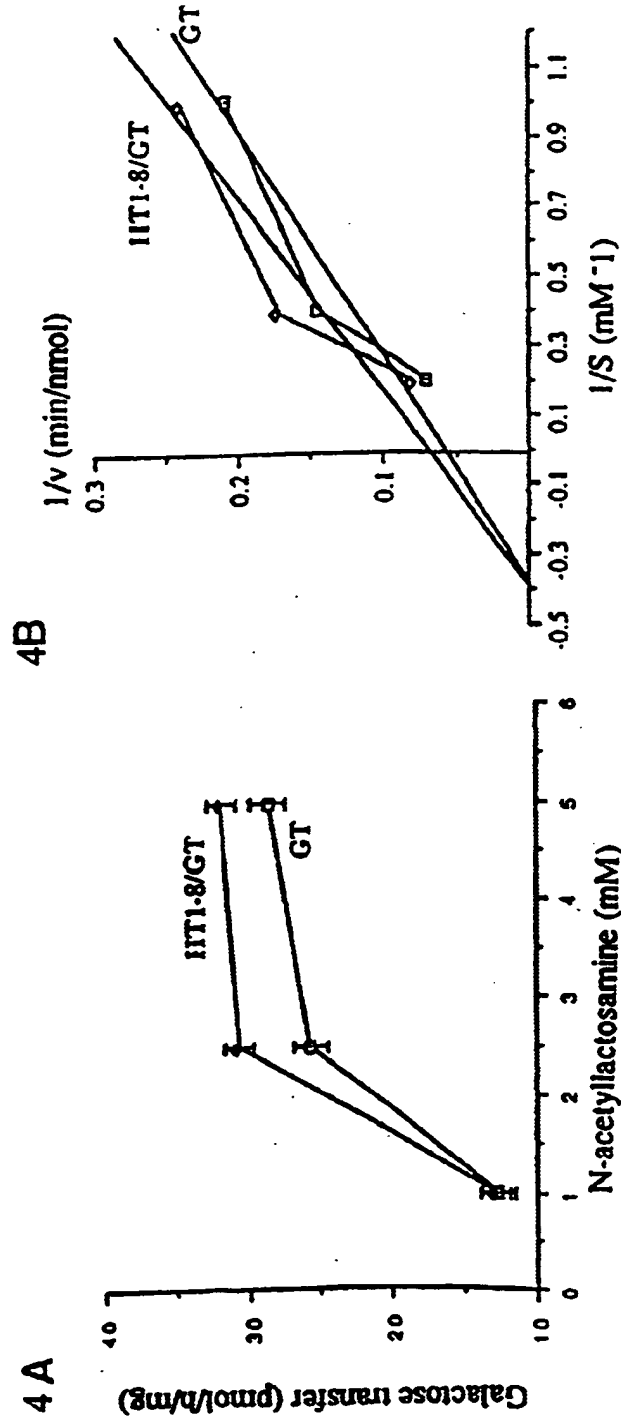


FIGURE 4

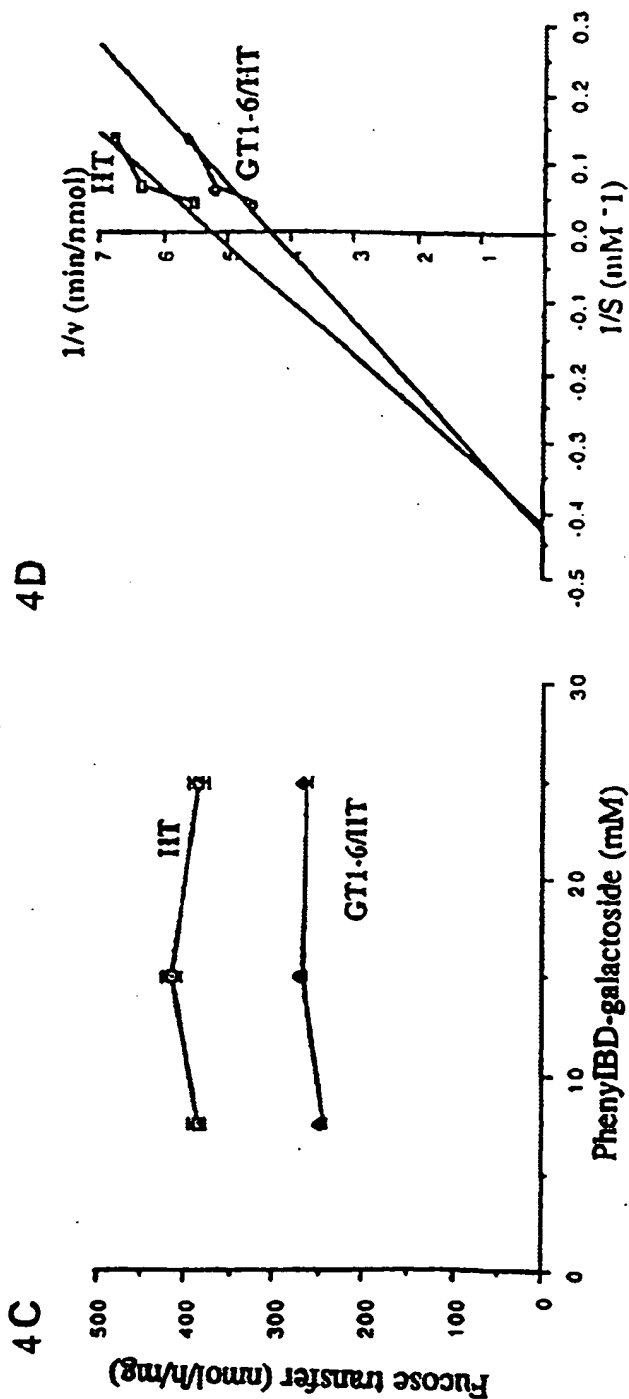


FIGURE 4

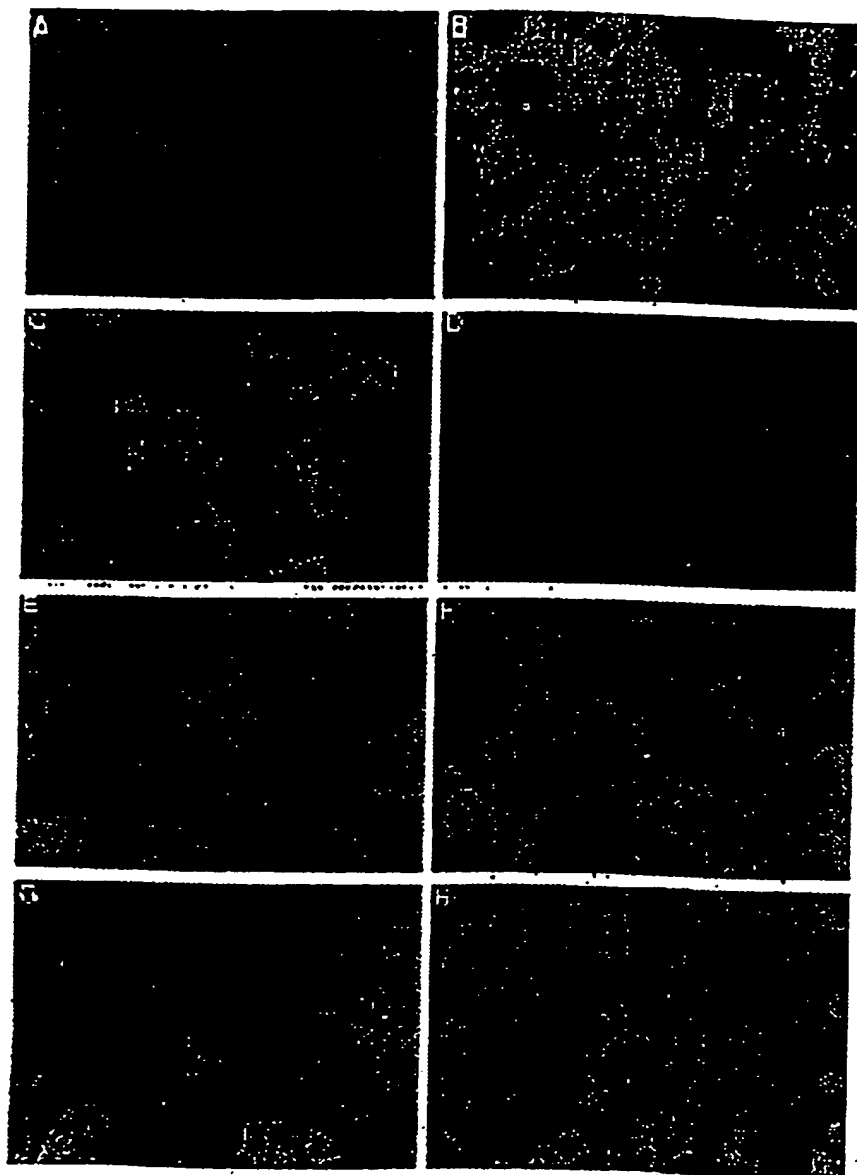


FIGURE 5

PORCINE SECRETOR SEQUENCE (SEQ. I.D. NOS: 1 and 2)

M L S M Q A S F F P T G P F I L 17
 CT ACA GCC ATG CTC AGC ATG CAG GCA TCC TTC TTC CCC ACG GGT CCC TTC ATC CTC 59
 F V F T A S T I F H L Q Q R N V K I Q P 37
 TTT GTC TTC ACG GCT TCC ACC ATA TTT CAC CTT CAG CAG AGG ATG GTG AAG ATT CAA CCC 119
 T W E L Q M V T Q V T T E S P S P Q L 57
 ACG TGG CAG TTA CAG ATG GTG ACG CAG GTG ACC ACA GAG AGC CCC TCG AGC CCC CAG CTG 179

PORCINE SECRETOR SEQUENCE

K G M W T I N A I G R L G N Q M G E Y A 77
 AAG GGC ATG TGG ACG ATC AAT GCC ATC GGC CGC CTG GGG AAC CAG ATG GGG GAG TAC GCC 239
 T L Y A L A R M N G R P A F I P P E M H 97
 ACC CTG TAC GCG CTG GCC AGG ATG AAC GGG CCG GCG TTC ATC CCG CCC GAG ATG CAC 299
 S T L A P I F R I T L P V L H A S T A R 117
 AGC ACG CTG GCC CCC ATC TTC AGG ATC ACC CTC CCG GTC CAC GCG AGC ACG GCC CGC 359
 R I P W Q N Y H L N D W N E E R Y R H I 137
 AGG ATC CCC TGG CAG AAC TAC CAC CTG AAC GAC TGG ATG GAG CAG CGG TAC CGC CAC ATC 419
 P G E Y V R L T G Y P C S W T F Y H L 157

FIGURE 6

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CCG GGG GAG TAC GTG CGC CTC ACG GGC TAC CCC TGC TCC TGG ACC TTC TAC GAC CAC CTG 479
 R T E I L R E F T L H N H V R E A Q D 177
 CGC ACC GAG ATC CTC CGG GAG TTC ACC CTG CAT AAC CAC GTG CGC GAG GAG GCC CAG GAT 539
 F L R G L R V N G S R P S T Y V G V H V 197
 TTC CTG CGG GGT CTG CGG GTG AAC GGG AGC CGA CCG AGT ACC TAC GTG GGG GTG CAC GTG 599
 R R G D Y V H V N P N V W K G V A D R 217
 CGC CGG GGG GAC TAC GTG CAC GTG ATG CCC AAC GTG TGG AAG GGC GTG GGC GAC CGG 659
 R Y L E Q A L D W F R A R Y R S P V F V 237
 CGG TAC CTG GAG CAG GCC CTG GAC TGG TTC CGG GCT CGC TAC CGC TCC CCC GTC TTT GTG 719
 V S S N G M A W C R E N I N A S R G D V 257
 GTC TCC AGC AAC GGC ATG GCC TGG TGG TGT CGG GAA AAC ATC AAT GCC TCG CGC GGC GAT GTG 779
 V F A G N G I E G S P A K D F A L L T Q 277
 GTG TTT GCC GGC AAT GGC ATC GAG GGC TCC CCC GCC AAA GAC TTC GCG CTG CTC ACG CAG 839
 C H H T V M T I G T F G I W A A Y L A G 297
 TGT AAC CAC ACT GTC ATG ACC ATT GGC ACG TTC GGG ATC TGG GCC GGC TAC CTT GCT GGT 899
 G E T I Y L A N Y T L P D S P F L K L F 317
 GGA GAG ACC ATC TAC CTG GCC AAT TAC ACG CTC CCG GAC TCT CCC TTC CTC AAA CTC TTT 959

FIGURE 6 (cont.)

K P E A A F L P E W I G I E A D L S P L 337
 AAG CCC GAG GCA GCC TTC CTG CCC GAG TGG ATT GGG ATC GAG GCA GAC CTG TCC CCA CTC 1019
 L K H * 340
 CTT AAG CAC TGA TGT CGG CTG TCC 1043

FIGURE 6 (cont.)



PIG H TRANSFERASE (SEQ. I.D. NOS: 3 and 4)

M W V P S R R H L C L T F L L V C V L A	20
ATGTGGGTCCCCAGCCGCGCCACCTCTGTCTGACCTTCTGCTAGTCTGTGTTTTAGCA	60
A I F F L N V Y Q D L F Y S G L D L L A	40
GCAATTTTCTTCTGAACGTCTATCAAGACCTCTTTTACAGTGGCTTAGACCTGCTGGCC	120
L C P D H N V V S S P V A I F C L A G T	60
CTGTGTCCAGACCATAACGTGGTATCATCTCCCGTGGCCATATTCTGCCTGGCGGGCAGG	180
P V H P N A S D S C P K H P A S F S G T	80
CCGGTACACCCCAACGCTCCGATTCTGTCCAAGCATCCTGCCTCCTTTTCCGGGACC	240
W T I Y P D G R F G N Q M G Q Y A T L L	100
TGGACTATTTACCCGATGGCCGGTTTGGGAACCAGATGGGACAGTATGCCACGCTGCTG	300
A L A Q L N G R Q A F I Q P A M H A V L	120
GCCCTGGCGCAGCTCAACGCGCCGAGGCCCTTCATCCAGCCTGCCATGCACGCCGTCCTG	360
A P V F R I T L P V L A P E V D R E A I	140
GCCCCCGTGTTCGCGATCACGCTGCCTGTCTGGCGCCGAGGTAGACAGGCACGCTCCT	420
W R E L E L H D W M S E D Y A H L K R P	160
TGGCGGGAGCTGGAGCTTACGACTGGATGTCCGAGGATTATGCCCACTTAAAGGAGCCC	480
W L K L T G F P C S W T F F H H L R E Q	180
TGGCTGAAGCTCACCGGCTTCCCTGCTCCTGGACCTTCTTCCACCACTCCGGGAGCAG	540
I R S E F T L H D H L R Q E A Q G V L S	200
ATCCGCAGCGAGTTCACCTGCACGACCACCTTCGGCAAGAGGCCAGGGGTTACTGAGT	600
Q F R L P R T G D R P S T F V G V H V R	220
CAGTTCGCTTACCCCGCACAGGGgACCGCCCCAGCACCTTCGTGGGGGTCCACGTGCGC	660
R G D Y L R V M P K R W K G V V G D G A	240
CGCGGGGACTATCTGCGTGTGATGCCAAGCGCTGGAAGGGGGTGGTGGGTGACGGCGCT	720
Y L Q Q A M D W F R A R Y E A P V F V V	260
TACCTCCAGCAGGCTATGGACTGGTTCGGGCCCCGATACGAAGCCCCCGTCTTTGTGGTC	780
T S N G M E W C R K N I D T S R G D V I	280
ACCAGCAACGGCATGGAGTGGTGGCGGAAGAACATCGACACCTCCCGGGGGGACGTGATC	840
F A G D G R E A A P A R D F A L L V Q C	300
TTTGCTGGCGATGGGCGGGAGGCCGCGCCCGCCAGGGACTTTGCGCTGCTGGTGCAGTGC	900
N H T I M T I G T F G F W A A Y L A G G	320
AACCACACCATCATGACCATTGGCACCTTCGGCTTCTGGGCGGcCTACCTGGCTGGTGgA	960
D T I Y L A N F T L P T S S F L K I P K	340
GATACcATCTACTTGGCTAACTTCACCTGCCcACTTCCAGCTTCTGAAGATCTTTAA	1020
P E A A F L F E W V G I N A D L S P L Q	360
CcCGAGGCTGCCTTCTGCCGAGTGGGTGGGCATTAATGCAGACTTGTCTCCACTCCAG	1080
M L A G P I	365
ATGTTGGCTGGGCCTGA	1098



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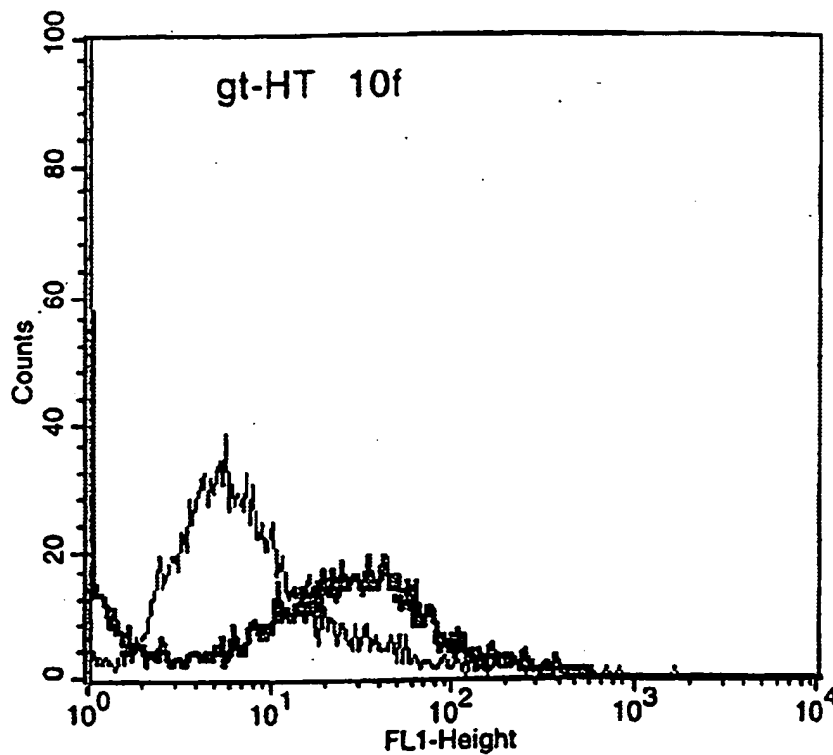


FIGURE 8

Docket No.: 30-015WO
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